

THIE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME?

Monsanto Jechnology TFÇ

DICTURE, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT. THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXPIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TIELE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC EPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE FIT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OPFERING IT FOR SALE, OR REPRODUCING IT, OR FING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

CORN, FIELD

'I119153'

In Testimonn Marrest, I have hereunto set my hand and caused the seal of the Plant Anrich Protection Office to be affixed at the City of Washington, D.C. this twenty-fifth day of November, in the year two thousand and eight.

Attost:

QC-3

Commissioner Plant Variety Protection Office Agricultural Marketing Service Collinard To Sub-affer

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and

AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE		the Paperwork Reduction Act (PRA) of 19	95.		
APPLICATION FOR PLANT VARIETY PR (Instructions and information collection bur	OTECTION CERTIFICATE	Application is required in order to determine (7 U.S.C. 2421). Information is held confid	a if a plant variety protection certificate is to be issued ential until certificate is issued (7 U.S.C. 2426).		
1. NAME OF OWNER	-	2. TEMPORARY DESIGNATION OR	3. VARIETY NAME		
Monsanto Technology L	LC. LLC	EXPERIMENTAL NAME None	1119153		
4. ADDRESS (Street and No., or R.F.D. No., City, State, and	ZIP Code, and Country)	5. TELEPHONE (include area code)	FOR OFFICIAL USE ONLY		
800 N. Lindbergh Blvd.		(815) 758-9281	PVPO NUMBER		
Creve Coeur, MO 63167		6. FAX (include area code)	1 200600130		
U.S.A.		(815) 758-3117	FILING DATE		
 If THE OWNER NAMED IS NOT A "PERSON", GIVE FOR ORGANIZATION (corporation, partnership, association, etc. 		9. DATE OF INCORPORATION -	March 2, 2006		
Corporation Delaware		August 27, 1999	March 2, 2002		
10. NAME AND ADDRESS OF OWNER REPRESENTATIVE	S) TO SERVE IN THIS APPLICATION. (F	irst person listed will receive all papers)	F FILING AND EXAMINATION FEES:		
•	•		s 4382.00		
Timothy R. Kain	Mich	ael J. Roth	R DATE 3/2/06		
8350 Minnegan Road	A 008	I. Lindbergh Blvd.	C CERTIFICATION FEE:		
Waterman, IL 60556	Creve	e Coeur, MO 63167	E : 768.00		
U.S.A.	U.S.A	\	E DATE 10/29/08		
11. TELEPHONE (Include area code)	12. FAX (Include area code)	13. E-MAIL	14. CROP KIND (Common Name)		
(815) 758-9281	(815) 758-9281 (815) 758-3117 <u>t</u>		Corn, Field		
15. GENUS AND SPECIES NAME OF CROP	the second secon	16. FAMILY NAME (Botanical)	17. IS THE VARIETY A FIRST GENERATION HYBRID?		
Zea mays		Graminae	□ YES X NO		
18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT S (Follow instructions on reverse)	SUBMITTED		O OF THIS VARIETY BE SOLD AS A CLASS OF of the Plant Variety Protection Act)		
a. X Exhibit A. Origin and Breeding History of the Varie	ty	☐ YES (If "yes", answer items 20 and 21 below) 20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES?			
b. X Exhibit B. Statement of Distinctness					
c. X Exhibit C. Objective Description of Variety	d				
 d.	•		DATION REGISTERED CERTIFIED		
f. X Voucher Sample (2,500 viable untreated seeds or,	for tuber propagated varieties,	21. DOES THE OWNER SPECIFY THAT SEED OF THIS YES NO VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?			
verification that tissue culture will be deposited and repository)	maintained in an approved public	IF YES, SPECIFY THE NUMBER 1,2,3, etc. FOR EACH CLASS.			
g. X Filing and Examination Fee (\$3,652), made payable States" (Mail to the Plant Variety Protection Office)	to "Treasurer of the United	FOUNDATION REGISTERED CERTIFIED (If additional explanation is necessary, please use the space indicated on the reverse.)			
22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATE FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRAN OR	RIAL) OR A HYBRID PRODUCED SFERRED, OR USED IN THE U. S.	23. IS THE VARIETY OR ANY COMPONENT O PROPERTY RIGHT (PLANT BREEDER'S R	F THE VARIETY PROTECTED BY INTELLECTUAL IGHT OR PATENT)?		
OTHER COUNTRIES?		X _{YES}	NO .		
X YES		IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)			
USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Ple		THE EXCITOR FORMSELL IN TOUSO BUT SPEED	mudaled an reverse.)		
24. The owners declare that a viable sample of basic seed of t for a tuber propagated variety a lissue culture will be deposed.	he variety has been furnished with applica sited in a public repository and maintained	ation and will be reptenished upon request in accord	dance with such regulations as may be applicable, or		
The undersigned owner(s) is(are) the owner of this sexually and is entitled to protection under the provisions of Section	y reproduced or tuber propagated plant va 42 of the Plant Variety Protection Act.	riety, and believe(s) that the variety is new, distinct	, uniform, and stable as required in Section 42,		
Owner(s) is(are) informed that false representation herein of	can jeopardize protection and result in per	nalties.			
SIGNATURE OF OWNER		SIGNATURE OF OWNER	444.4441		

Owner(s) is(are) informed that false representation her	ein can jeopardize protection and result in p	enalties.	•
SIGNATURE OF OWNER / WOOTH R	6	SIGNATURE OF OWNER	
NAME (Please print or type) Timothy R. Kain		NAME (Please print or type)	
CAPACITY OR TITLE Patent Scientist	Z/28/06	CAPACITY OR TITLE	DATE

ST-470 (02-10-2003) designed by the Plant Variety Protection Office using Word 2000. Reptaces former versions of ST-470, which are obsolete.

(See reverse for instructions and information collection burden statement)

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$3,652 (\$432 filing fee and \$3,220 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfilled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$432 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

> Plant Variety Protection Office Telephone: (301) 504-5518 FAX: (301) 504-5291

Homepage: http://www.ams.usda.gov/science/pvpo/pvp.htm

ITEM

18a. Give:

- (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
- (2) the details of subsequent stages of selection and multiplication;
- (3) evidence of uniformity and stability; and
- (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
 - (1) identify these varieties and state all differences objectively;
 - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
 - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- . 18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
- 19. If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
- 22. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
- 23. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.
- 21. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)
- 22. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

Parent of a hybrid sold in the U.S. - April 2005

23. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

U.S. Patent Application No. 11/096,213 - filed March 31, 2005 (I119153)

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center-East, Beltsville, MD 20705. Telephone: (301) 504-8089. http://www.ams.usda.gov/lsg/seed.htm

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 3.0 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer ST-470 (02-10-2003) designed by the Plant Variety Protection Office with

EXHIBIT A

Origin and Breeding History 1119153

1119153 was selected for its greater dry down, improved grain quality, greater vigor, increased tassel size and greater combining ability.

Summer 1997	The inbred line 01INL1 (a proprietary DEKALB Genetics Corporation inbred) was crossed to the inbred line 91ISI5 (a proprietary DEKALB Genetics Corporation inbred) in nursery rows OL97:7: 411-29 X 338-30.
Winter 1997-1998	The F1 seed was grown and self-pollinated in nursery rows 78'13A5-27.
Summer 1998	The F2 seed was grown and self-pollinated in nursery rows 98A109-1 thru 98A109-19. 39 ears were selected.
Summer 1999	F3 ears were grown ear-to-row and self-pollinated. 3 ears were selected in nursery row 99A210-44.
Winter 1999-2000	F4 ears were grown ear-to-row and self-pollinated. In nursery row MXSS:1639. 3 ears were selected.
Summer 2000	F5 ears were grown ear-to-row and self-pollinated. 3 ears from nursery row 00A:7411 were selected and designated as coded inbred l119153.
Winter 2000-01	F6 ears were grown ear-to-row and self-pollinated. 4 ears from nursery row 00KLS:1031 were selected.
Summer 2001	F7 ears were grown ear-to-row and self-pollinated. 10 ears were selected from nursery rows 01A:241 to 01A:245.
Winter 2001-02	F8 ears were grown ear-to-row and self-pollinated. 20 ears were selected from nursery row MX 01MII 027621.
Summer 2002	F9 ears were grown ear-to-row and self-pollinated. Final selection was completed in nursery rows 02A:1294 to 02A:1333. This selection consisted of bulking S10 ears.

Statement of Stability and Uniformity

Corn inbred I119153 was coded in 2000 with final selection made in 2002. This inbred has been reproduced by self pollination for three generations and judged to be stable. Inbred I119153 is uniform for all traits observed.

Statement of Variants

I119153 shows no variants other than what would normally be expected due to environment or that would occur for almost any character during the course of repeated sexual reproduction.

EXHIBIT B (revised)

Statement of Distinctness

Monsanto Technology L.L.G. believes that I119153 is most similar to corn inbred 91ISI5, an inbred developed by DEKALB Genetics Corporation.

I119153 and 91ISI5 differ most significantly in the following traits:

Trait	I119153	91ISI5
Glume Color	Light Red	Green
	(2.5 R 6/8)	(5 GY 4/8)
Silk Color	Green-Yellow	Pink
	(2.5 GY 8/6)	(2.5 R 7/6)

2002

Tassel Branch No.
14.6
(Std Dev = 2.7, N= 10)
7.5
(Std Dev = 0.7, N= 10)
0.000
**

2003

Variety	Tassel Branch No.
l119153	19.7
	(Std Dev = 2.6, N=10)
91ISI5	8.3
	Std Dev = 0.6 , N=10)
P_Val	0.000
Signif.	**

Significance levels are indicated as: + = 10%, * = 5 %, ** = 1%

Corn variety I119153 has light red glume color, green-yellow silk and greater number of tassel branches while comparative corn variety 91ISI5 has green glume color, pink silk and less number of tassel branches.

EXHIBIT B (revised)

Description of Experimental Design

The corn varieties I119153, 91ISI5 and A619 were grown at the Waterman, IL observation nursery in years 2002-2003. The varieties were planted in 2 row plots with 15 plants per row in each of the three years. Trait data were collected on 10 random representative plants for most traits from each 2 row plot. Data on qualitative traits are usually collected on 10 plants from each 2 row plot. For Exhibit C all data were pooled and reported as means across the years for subject variety and the standard variety with standard deviation. The varieties are randomly planted in a 4.5 acre observation nursery which is located within a larger 18 acre field. Besides the observation nursery, this field consists of a research seed increase nursery and an IP seed inventory nursery. The location of each of these individual nurseries is rotated each year to a different location within the 18 acre field. Therefore subject inbreds are not planted adjacent to comparative or standard varieties and may be located in different areas of the larger field each year, therefore being influenced by spacial differences within the field. Growing conditions within the field are not uniform as there are some slight topographical variations such as lower areas which may accumulate and retain water or higher areas which are usually drier. The field is tiled and therefore a variety maybe planted close to a tile line while a comparative variety maybe planted further away and in a low spot within the field. Temporal varieties can exist as weather conditions from year to year can vary as well as planting dates can vary from year to year based on weather conditions. Weather conditions each year can vary the maturity rate of the varieties due to either favorable or unfavorable growing conditions.

Trait variability is not observed for each variety within its own test plot-plants are usually uniform and data are collected on the "most" representative plants- variability occurs due to spacial location of the test plot for that variety from year to year and to the temporal variation of weather conditions from year to year during the 2-3 years data are collected.

Waterman Research Station Weather Data 2002-2003

Date	Average Precip. (mm)	Ave. Monthly Temp – Max. (F°)	Ave. Monthly Temp-Min (F°)	Ave. Monthly Rel. Humid Max (%)	Ave. Monthly Rel. Humid – Min (%)
June 2002	5.3	81.3	60.4	90.7	47.7
July 2002	1.5	87.0	64.9	93.2	48.3
August 2002	5.7	83.1	61.0	96.0	51.8
Sept. 2002	1.5	79.4	52.6	95.0	42.7
June 2003	2.0	75.7	55.7	-	-
July 2003	6.4	82.2	62.2	-	-
August 2003	2.6	83.5	63.5	-	-
Sept 2003	2.6	72.9	52.9	_	-

United States Department of Agriculture, Agricultural Marketing Service Science and Technology, Plant Variety Protection Office National Agricultural Library Building, Room 400 Beltsville, MD 20705-2351

OBJECTIVE DESCRIPTION OF VARIETY
CORN (Zea mays L.)

.Monsanto Technology L.L.G. LLC Address (Street & No., or R.F.D. No., City, State, Zip Code and Country) 8350 Minnegan Road, Waterman, IL 60556 Place the appropriate number that describes the varietal characters typical of this inbred variety in the necessary. Completeness should be striven for to establish an adequate variety description. COLOR CHOICES (Use in conjunction with Munsell color code to describe all color choices; descri		FOR OF	0060013	/PO Number
Address (Street & No., or R.F.D. No., City, State, Zip Code and Country) 8350 Minnegan Road, Waterman, IL 60556 Place the appropriate number that describes the varietal characters typical of this inbred variety in the necessary. Completeness should be striven for to establish an adequate variety description. COLOR CHOICES (Use in conjunction with Munsell color code to describe all color choices; descri	ibe #25 and #26 in Comr 16=Pale Pu 17=Purple 18=Colories	2 justify whole numents section):	FICIAL USE P	9
8350 Minnegan Road, Waterman, IL 60556 Place the appropriate number that describes the varietal characters typical of this inbred variety in the necessary. Completeness should be striven for to establish an adequate variety description. COLOR CHOICES (Use in conjunction with Munsell color code to describe all color choices; described in the conjunction with Munsell color code to describe all color choices; described in the conjunction with Munsell color code to describe all color choices; described in the conjunction with Munsell color code to describe all color choices; described in the conjunction with Munsell color code to describe all color choices; described in the conjunction with Munsell color code to describe all color choices; described in the conjunction with Munsell color code to describe all color choices; described in the conjunction with Munsell color code to describe all color choices; described in the conjunction with Munsell color code to describe all color choices; described in the conjunction with Munsell color code to describe all color choices; described in the conjunction with Munsell color code to describe all color choices; described in the conjunction with Munsell color code to describe all color choices; described in the conjunction with Munsell color code to describe all color choices; described in the color code to describe all color code to desc	ibe #25 and #26 in Comr 16=Pale Pu 17=Purple 18=Colories	2 justify whole numents section):	0060013	9
Place the appropriate number that describes the varietal characters typical of this inbred variety in the necessary. Completeness should be striven for to establish an adequate variety description. COLOR CHOICES (Use in conjunction with Munsell color code to describe all color choices; describe all color choices; describe all color choices.)	ibe #25 and #26 in Comr 16=Pale Pu 17=Purple 18=Colories	t justify whole numents section):		,
COLOR CHOICES (Use in conjunction with Munsell color code to describe all color choices; descri	ibe #25 and #26 in Comr 16=Pale Pu 17=Purple 18=Colories	ments section):	mbers by adding leadir	g zeroes if
COLOR CHOICES (Use in conjunction with Munsell color code to describe all color choices; descri	16=Pale Pu 17=Purple 18=Colorie:			
01=Light Green 06=Pale Yellow 11=Pink 02=Medium Green 07=Yellow 12=Light Red 03=Dark Green 08=Yellow-Orange 13=Cherry Red 04=Very Dark Green 09=Salmon 14=Red 05=Green-Yellow 10=Pink-Orange 15=Red & White	20=White C		21=Buff 22=Tan 23=Brown 24=Bronze 25=Variegated (De 26=Other (Descr	
STANDARD INBRED CHOICES (Use the most similar (in background and maturity) of these to may relieve the most similar (in background and maturity) of these to may relieve the most similar (in background and maturity) of these to may relieve the most similar (in background and maturity) of these to may relieve the most similar (in background and maturity) of these to may relieve the most similar (in background and maturity) of these to may relieve the most similar (in background and maturity) of these to may relieve the most similar (in background and maturity) of these to may relieve the most similar (in background and maturity) of these to may relieve the most similar (in background and maturity) of these to may relieve the most similar (in background and maturity) of these to may relieve the most similar (in background and maturity) of these to may relieve the most similar (in background and maturity) of these to may relieve the most similar (in background and maturity) of these to may relieve the most similar (in background and maturity) of these to may relieve the most similar (in background and maturity) of these to may relieve the most similar (in background and maturity) of these to may relieve the most similar (in background and maturity) of these to may relieve the most similar (in background and maturity) of these to may relieve the most similar (in background and maturity) of these to may relieve the most similar (in background and maturity) of these to may relieve the most similar (in background and maturity) of the most similar (in background and maturity) of these to may relieve the most similar (in background and maturity) of the most similar (in background and maturity) of the most similar (in background and maturity (in background and maturity) of the most similar (in b		Sweet C C Popcori Si Pipecor	Corn: 13, Iowa5125, P39, 21: n: G1533, 4722, HP301, I	HP7211
TYPE: (describe intermediate types in Comments section)		Standard Inbred I	Name A619	
2 1=Sweet 2=Dent 3=Flint 4=Flour 5=Pop 6=Ornamental 7=Pipecorn		2 Type		
2. REGION WHERE DEVELOPED IN THE U.S.A.:		Standard Seed S	ource	
2 1=Northwest 2=North central 3=Northeast 4=Southeast 5=South central 6=South		Region		
MATURITY (In Region Best Adaptability; show Heat Unit formula in "Comments" section): DAYS		DAYS 0 7 4	HEAT UNITS 1 5 8 0.0	
0 7 5 1 3 8 5. 0 From emergence to 50% of plants in pollen		072	1 5 5 5.0	
From 10% to 90% pollen shed				
From 50% silk to optimum edible quality				
From 50% silk to harvest at 25% moisture				
4. PLANT: Standard Deviation	Sample Size	Mean	Standard Deviation	Sample Size
2 0 2.4 cm Plant Height (to tassel tip) 11.7	30	1 8 8.3	14.1	30
0 8 6.2 cm Ear Height (to base of top ear node) 10.4	30	0 5 4.7	7.2	30
1 4. 8 cm Length of Top Ear Internode 1.9	30	0 1 5.5	1.2	30
Average Number of Tillers				
1.0 Average Number of Ears per Stalk 0.1	30	0 0 1.0	0.0	30
1 Anthocyanin of Brace Roots: 1=Absent 2=Faint 3=Moderate 4=Dark	.	1		
Application Variety Data Page 1	s	Standard Inbred I	Data	

Application V	chu Data	····.		1		
Application Vari	ety Data	Page 2		Standard Inbred	d Data	
5. LEAF:		Standard Deviation	Sample Size	Mean	Standard Deviation	Sample Size
06.7	cm Width of Ear Node Leaf	0.5	30	8. 6	0.5	30
7 3. 7	cm Length of Ear Node Leaf	2.3	30	7 1.3	3.5	30
4.4	Number of leaves above top ear	0.5	30	5. 1	0.6	15
2 3. 5	degrees Leaf Angle (measure from 2nd leaf above ear at anthesis	8.9 s to stalk above leaf)	30	2 9. 3	6.5	30
03	Leaf Color (Munsell code 5 GY 3/4)			0 2 (Munseli	l code 5 GY 4/8)	
1	Leaf Sheath Pubescence (Rate on scale from	n 1=none to 9=like peach fuzz)		2		
5	Marginal Waves (Rate on scale from 1=none	to 9=many)		6		
4	Longitudinal Creases (Rate on scale from 1=	none to 9=many)		7		
6. TASSEL:		Standard Deviation	Sample Size	Mean	Standard Deviation	Sample Size
1 6. 6	Number of Primary Lateral Branches	2.7	30	9. 8	2.0	30
2 3. 0	Branch Angle from Central Spike	5.5	30	2 6.7	8.0	30
3 7. 6	cm Tassel Length (from top leaf collar to tassel tip)	2.7	30	4 1.7	3.3	30
6.6	Pollen Shed (Rate on scale from 0=male sterile	e to 9=heavy shed)		5.6		
. 07	Anther Color (Munsell code 2.5 Y 8/10)			0 7 (Muns	ell code 2.5 Y 8/10)	
12	Glume Color (Munsell code 2.5 R 6/8)			0 2 (Munse	ell code 5 GY 4/8)	
1	Bar Glumes (Glume Bands): 1=Absent 2=Pres	ent -		1		
7a. EAR (Unhus	ked Data):					
0.5 Sill	Color (3 days after emergence) (Munsell code	2.5 GY 8/6)			ell code 2.5 Y 8/10)	
0 2 Fre	sh Husk Color (25 days after 50% silking) (Mun	sell code 5 GY 4/8)			ell code 5 GY 4/8)	
2 1 Dry	Husk Color (65 days after 50% Silking) (Munse	II code 2.5 Y 8/4)			ell code 2.5 Y 8/4)	
3 Posi	ition of Ear at Dry Husk Stage: 1≃Upright 2≃Ho	rizontal 3=Pendent		1		
7 Hus	k Tightness (Rate on scale from 1≕very loose to	9=very tight)		9		
2 Hus tip) 4=Very	k Extension (at harvest): 1=Short (ears exposed / Long (>10 cm)	d) 2=Medium (<8 cm) 3=Long (8	-10 cm beyond ear	2		
7b. EAR (Husked	l Ear Data):	Standard Deviation	Sample Size	Mean	Standard Deviation	Sample Size
1 3. 7	cm Ear Length	1.9	30	1 2.5	2.5	20
3 9. 1	mm Ear Diameter at mid-point	2.7	30	4 1.8	3.6	10
9 6.5	gm Ear Weight	9.6	30	8 9.4	9.4	20
1 9 .2	Number of Kernel Rows	0.9	30	1 3.2	1.0	10
2	Kernel Rows: 1=Indistinct 2=Distinct			2		
1	Row Alignment: 1=Straight 2=Slightly Curved 3	3=Spiral		1		
0.80	cm Shank Length	1.7	30	1 0.5	2.7	15
2	Ear Taper: 1=Slight 2=Average 3=Extreme			2		
Application Variety		··········		Standard inbred	Data	
	first page to choose color codes for color traits			I		

Application Mariata Data				20000	
Application Variety Data	Page 3		Standard Inbred Data		
8. KERNEL (Dried):	Standard Deviation	Sample Size	Mean	Standard Deviation	Sample Size
1 0 .6 mm Kernel Length	0.5	30	1 0.7	0.5	10
7 .6 mm Kernel Width	0.4	30	0 9.1	0.5	10
4 .8 mm Kernel Thickness	0.6	30	0 4.7	0.7	10
2 8.7% Round Kernels (Shape Grade)	3.2	500g	2 2 .8	8.9	500g
1 Aleurone Color Pattern: 1=Homozygous 2=Segrega	ating (describe)		1		
1 9 Aleurone Color (Munsell code Lighter than 5 Y 9/1)			1 9 (Munse	ll code Lighter Than 2.5 Y	['] 9/2)
0 7 Hard Endosperm Color (Munsell code 2.5 Y 8/10)			2 6 Orang	ge (Munsell code 7.5 YF	R 6/8)
3 Endosperm Type: 1=Sweet (su1) 2=Extra Sweet (s 5=Waxy Starch 6=High Protein 7=High Lysine 10=Other	sh2) 3=Normal Starch 4 8=Super Sweet (se)	4=High Amylose Starch 9=High Oil	0 3		
2 3. 7 gm Weight per 100 Kernels (unsized sample)	3.4	1900 seeds	2 2. 1	4.6	2000 seeds
9. COB:	Standard Deviation	Sample Size	Mean	Standard Deviation	Sample Size
2 2 .0 mm Cob Diameter at mid-point	1.2	30	2 7.2	1.2	10
1 1 Cob Color (Munsell code 5 R 6/6)			1 9 (M uns	sell code Lighter then 5 Y	9/1)
S Anthracnose Leaf Blight (Colletotrichum graminicola) Common Rust (Puccinia sorghi) Common Smut (Ustilago maydis) 5 Eyespot (Kabatiella zeae) 6 Goss's Wilt (Clavibacter michiganense spp. nebraskense) 4 Gray Leaf Spot (Cercospora zeae-maydis) 5 Helminthosporium Leaf Spot (Bipolaris zeicola)	Race 2 Race 1 Race O		5 Northern Le. 7 Southern Le. 5 Southern Ru: Stewart's W Other (Spec	pot porium Leaf Spot	Race 1Race O
Application Variety Data			Standard Inbred	Data	
Note: Use chart on first page to choose color codes for color traits.			Standard mored		

200600 139

Application Variety Data	Page 4	1.VII.	Standard Inbred Data
11. INSECT RESISTANCE (Rate from 1 (most susceptible) to 9 (most leave blank if not tested):		Sample Size	Standard Deviation Sample Size
Banks Grass Mite (Oligonychus pratensis)		oumpio died	Banks Grass Mite
Corn Earworm (Helicoverpa zea)			Corn Earworm
Leaf-Feeding Silk Feeding: mg larval wt. Ear Damage			Leaf Feeding
Corn Leaf Aphid (Rhopalosiphum maidis)			Ear Damage
Corn Sap Beetle (Carpophilus dimidiatus)			Corn Leaf Aphid Corn Sap Beetle
European Corn Borer (Ostrinia nubilalis) 1st Generation (Typically Whorl Leaf Feeding) 2nd Generation (Typically Leaf Sheath-Collar Feeding) Stalk Tunneling : cm tunneled/plant			European Corn Borer 1st Generation 2nd Generation
Fall Armyworm (Spodoptera frugiperda)			
Leaf-Feeding Silk-Feeding: mg larval wt.			Leaf Feeding
Maize Weevil (Sitophilus zeamaize) Northern Rootworm (Diabrotica barberi)		··-	Maize Weevil
Southern Rootworm (Diabrotica undecimpunctata)			Northern Rootworm Southern Rootworm
Southwestern Corn Borer (<i>Diatraea grandiosella</i>) Leaf Feeding Stalk Tunneling: cm tunneled/plant			Southwestern Corn Borer Leaf Feeding
Two-spotted Spider Mite (Tetranychus urticae)			Two-spotted Spider Mite
Western Rootworm (Diabrotica virgifera virgifera) Other (Specify)			Western Rootworm Other (Specify)
12. AGRONOMIC TRAITS:			
7 Stay Green (at 65 days after anthesis) (Rate on a scale from	1=woret to 9=excellent \		6 Stay Crass
0 0. 0 % Dropped Ears (at 65 days after anthesis)	r-worst to s-excellent.)		6 Stay Green
0 0 .0 % Pre-anthesis Brittle Snapping			0 0. 2 % Dropped ears 0 0.0 % Pre-anthesis Brittle Snapping
0 0. 0 % Pre-anthesis Root Lodging			0 0.0 % Pre-anthesis Root Lodging
0:0. 0 % Post-anthesis Root Lodging (at 65 days after anthesis)			0 0.0 % Post-anthesis Root Lodging
Kg/ha Yield of Inbred Per Se (at 12-13% grain moisture)			Yield
13. MOLECULAR MARKERS: (0=data unavailable; 1=data available but	not supplied: 2=data supplie		
0 Isozymes 0 RFLP's 0 RAPD's	Other (Specify)	u)	
REFERENCES:			To the second se
Butler, D.R. 1954. A System for the Classification of Corn Inbred Lines. Emerson, R.A., G.W. Beadle, and A.C. Fraser. 1935. A Summary of Lintferr, D.F., G.F. Bills, G.P. Chamuris, A.Y. Rossman. 1989. Fungi on Pla Inglett, G.E. (Ed.) 1970. Corn: Culture, Processing, Products. Avi Publist Jugenheimer, R.W. 1976. Corn: Improvement, Seed Production, and Us McGee, D.C. 1988. Maize Diseases. APS Press, St. Paul, MN. 150 pp. Munsell Color Chart for Plant Tissues. Macbeth. P.O. Box 230. Newburg The Mutants of Maize. 1968. Crop Science Society of America. Madison Shurtleff, M.C. 1980. Compendium of Corn Diseases. APS Press, St. Pa Sprague, G.F., and J.W. Dudley (Editors). 1988. Corn and Corn Improve Stringfield, G.H. Maize Inbred Lines of Ohio, Ohio A.E.S., Bul. 831. 1958 U.S. Department of Agriculture. 1936, 1937. Yearbook.	kage Studies in Maize. Corne int and Plant Products in the hing Company, Westport, CT ies. John Wiley & Sons, New gh, N.Y. 12551-0230 i, WI. aut, MN. 105 pp.	ill A.E.S., Mem. 180. United States. The A York.	merican Phytopathological Society, St. Paul, MN.
COMMENTS (e.g. state how heat units were calculated, standard inbred	seed source, and/or where o	ata was collected. C	ontinue in Exhibit D):
Heat Unit Calculation: GDU = <u>Daily Max Temp (<=86°F)</u>	+ Daily Min Temp (>=	<u>50°F)</u> - 50°F	
Supplement data for subject variety "I119153' obtained fr	om 2006 seed invento	ry and productio	on parent test data.

11. Additional explanation on ownership (Trace ownership from original breeder to current owner. Use the reverse for extra space if needed):

Corn Variety [119153 was originated and developed by a breeder employed by Monsanto Technology LLC By agreement between Monsanto Technology LLC and the breeder, all rights to any invention, discovery or development are assigned to Monsanto Technology L.L.C. No rights to such invention, discovery or development are retained by the breeder.

PLEASE NOTE:

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

- 1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
- 2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
- 3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 0.1 hour per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, D.C. 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provide and employer

NO

REPRODUCE LOCALLY. Include form number and date on all reproductions.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 5 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE **SCIENCE AND TECHNOLOGY PLANT VARIETY PROTECTION OFFICE** BELTSVILLE, MD 20705

EXHIBIT F

NAME OF OWNER (S)	ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country)	TEMPORARY OR EXPERIMENTAL DESIGNATION	
Timothy R. Kain	8350 Minnegan Road		
	Waterman, IL 60556 U.S.A.	VARIETY NAME I119153	
NAME OF OWNER REPRESENTATIVE (S)	ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country)	FOR OFFICIAL USE ONLY	
Monsanto Technology LLC	8350 Minnegan Road Waterman, IL 60556	PVPO NUMBER	
	U.S.A.	200600139	

I do hereby declare that during the life of the certificate a viable sample of propagating material of the subject variety will be deposited, and replenished as needed periodically, in a public repository in the United States in accordance with the regulations established by the Plant Variety Protection Office.

7 FEB 2008